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QUALCOMM INCORPORATED  
5775 MOREHOUSE DR.  
SAN DIEGO, CA 92121

EXAMINER
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PHUNG, LUAT

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* TAESANG YOO, SIDDHARTHA MALLIK, and TAO LUO

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Appeal 2016-007578  
Application 13/016,837  
Technology Center 2400

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Before ROBERT E. NAPPI, JOHN D. HAMANN, and  
ALEX S. YAP, *Administrative Patent Judges*.

NAPPI, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) of the Final Rejection of claims 1 through 43. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

INVENTION

This invention is directed to a method to communicate with both legacy user equipment and expanded user equipment. *See* Abstract. Claim 1 is representative of the invention and reproduced below.

1. A method used in a wireless communication system, comprising:  
generating one or more signals containing information that is recognizable by at least one expanded capability user equipment (UE) and identified as invalid by at least one legacy UE, wherein the information is related to a feedback request that is recognizable by the at least one expanded capability UE, and wherein the information relating to the feedback request is identified as invalid by the at least one legacy UE; and  
transmitting the one or more signals.

#### REJECTIONS AT ISSUE

The Examiner has rejected claims 1, 2, 7 through 9, 14 through 16, 21 through 24, 29, 30, 35, 36, and 41 through 43 under 35 U.S.C. § 102(e) as anticipated by Moon (US 2009/01775372 A1, published July 9, 2009). Final Action 6–9.<sup>1</sup>

The Examiner has rejected claims 3, 4, 6, 10, 11, 13, 17, 18, 20, 25, 26, 28, 31, 32, 34, 37, 38, and 40 under 35 U.S.C. § 103(a) as unpatentable over Moon and Nory (US 2010/0331030 A1, published Dec. 30, 2010). Final Action. 10–12.

The Examiner has rejected claims 5, 12, 19, 27, 33, and 39 under 35 U.S.C. § 103(a) as unpatentable over Moon and Kim (US 2012/0147805 A1, published June 14, 2012). Final Action. 13.

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<sup>1</sup> Throughout this Decision, we refer to the Appeal Brief dated December 17, 2015; the Reply Brief dated August 3, 2016; Final Action mailed June 4, 2015; and the Examiner's Answer mailed July 5, 2016.

## ANALYSIS

We have reviewed Appellants' arguments in the Appeal Brief and the Reply Brief, the Examiner's rejections, and the Examiner's response to Appellants' arguments. Appellants have persuaded us of error in the Examiner's rejection of independent claims 1, 8, 15, 22, 23, 29, 35 and 41.

Appellants argue Moon does not teach generating signals containing information that is recognized by at least one expanded capability device and identified as invalid by at least one legacy device. App. Br. 9. Further, Appellants argued that even if Moon's reserved bits are equated to the claimed information recognized as invalid, there is no teaching in Moon that these bits are related to a feedback request as recited in the independent claims. App. Br. 10

In response to Appellants' arguments, the Examiner finds that Moon teaches the reserved bits are not processed by the legacy equipment (*i.e.*, ignored), and as such meets the claim limitation directed to information recognized as invalid by legacy devices. Answer 3–5 (citing Moon Fig. 4, ¶¶ 35, 43, 49, 50, 53, and 66). The Examiner finds that Moon teaches these reserved bits are related to feedback, as the preamble is used for synchronization and channel estimation (*i.e.*, feedback). Answer 6 (citing Moon ¶ 49). Further, the Examiner cites to extrinsic evidence to show that channel state measurements relate to feedback requests. Answer 7 (citing Kim Fig. 8, ¶ 55).

Each of the independent claims recites a limitation directed to information identified as invalid by legacy equipment, and that the information is related to a feedback request. We disagree with the Examiner's finding that the reserved bits of Moon are related to a feedback

request. Paragraph 35 of Moon, cited by the Examiner, states that the preamble, which is used for initial synchronization, is separate from the frame control header (“FCH”) (*see also* Fig 2 and ¶ 34). The reserved bits, which the Examiner equates to the claimed information identified as invalid, are in the FCH and not the preamble (*see* ¶ 49). Thus, we do not find that the reserved bits (which are in the FCH) are related to the channel estimate (and feedback), which is in the preamble. Accordingly, the Examiner has not shown that Moon anticipates the limitations of each of independent claims 1, 8, 15, 22, 23, 29, 35, and 41, and we do not sustain the Examiner’s anticipation rejection of these claims. Dependent claims 2, 7 through 9, 14, 16, 21, 24, 30, 36, 42, and 43, depend on either independent claim 1, 8, 15, 22, 23, 29, or 35, and for the same reasons stated above, we also do not sustain the Examiner’s anticipation rejection of these claims.

The Examiner has not shown that that teachings of Nory or Kim, used in the obviousness rejections, make up for the deficiencies in the anticipation rejection. Accordingly, we do not sustain the Examiner’s rejections of claims 3 through 6, 10 through 13, 17 through 20, 25 through 28, 31 through 34, and 37 through 40.

#### DECISION

The decision of the Examiner to reject claims 1 through 43 is reversed.

#### REVERSED